



Naghme Dashti

📞 Phone number: (+31) 0657368508 ✉ Email address: naghme.dashti@gmail.com

🌐 LinkedIn: [Naghme Dashti](#)

📍 Work: Den Haag (Netherlands)

📍 Other: Dortmund (Germany)

ABOUT ME

I am a medical informatics specialist in leveraging advanced data analytics, machine learning, and artificial intelligence to address complex challenges. My focus lies in creating AI-driven solutions that foster innovation and empower decision-making.

I have developed predictive models for disease detection, clinical dashboards, and AI systems designed to enhance patient safety and operational efficiency. My work bridges the gap between cutting-edge AI-based and data science techniques with real-world applications, particularly in healthcare.

I am deeply passionate about harnessing the power of AI and data science to transform healthcare environments and unlock new possibilities. Let's connect to collaborate on innovative solutions that push the boundaries of what's possible in data science and AI.

WORK EXPERIENCE

AI & Medical Informatics Specialist (Part-Time)

Frank & the Backs, ICPet Startup [01/09/2023 – Current]

City: Den Haag | Country: Netherlands

- Designed a scalable data-driven platform for preventive pet healthcare, leveraging AI and NLP for real-time health monitoring
- Integrated AI-driven disease detection systems and NLP-based guidance tools
- Define and align the technical roadmap with overarching business objectives to ensure strategic growth and innovation.
- Led a multidisciplinary team, enhancing collaboration and technical excellence
- Secured acceptance for the IND Netherlands Startup Visa based on project success

Medical Informatics Specialist & Clinical Data Analyst

Mashhad University of Medical Sciences, IT and Statistics Management [03/03/2024 – 03/10/2024]

City: Mashhad | Country: Iran

- Created interactive dashboards using Power BI, enhancing data visualization and real-time decision-making.
- Enhancing operational insights and clinical processes, and data analysis of various datasets of inpatient departments
- Optimized and maintained PDMS and HIS, ensuring seamless operation and integration with clinical systems.
- Designed and deployed ETL pipelines for automating patient data reporting, reducing processing time by 70%.
- Led cross-departmental training sessions for clinicians, promoting system adoption and efficient use

Medical Informatics Specialist & Researcher (Part-Time)

Mashhad University of Medical Sciences, Department of Medical Informatics [25/09/2019 – 19/09/2024]

City: Mashhad | Country: Iran

- Developed an AI-powered Medication Decision Support System (MDSS), enhancing patient safety through AI and advanced clinical data analysis, reducing prescription errors by 20%.
- Design an AI model for early detection of mental disorders through speech recognition and data analysis with AI and NLP techniques.
- Develop and implement AI-driven prediction models to determine the presence of heart disease in patients, leveraging advanced machine learning algorithms for accurate and efficient diagnosis
- Conducted training and workshops to promote clinician engagement with AI-based tools

Software Engineer & Data Analyst

Ministry of Interior, IT and Network Management Office [25/10/2017 – 02/03/2024]

City: Mashhad | Country: Iran

- Designed and implemented data pipelines and interactive dashboards for healthcare policy analysis and decision-making.
- Enhanced centralized communication portals, streamlining decision-making processes, improving operational efficiency by 40%.
- Optimized workflows by automating reporting processes and integrating data from multiple sources.
- Designed dashboards to analyze economic indexes, providing actionable insights to stakeholders.

Lecturer in Computer Science (Part-Time)

Payame Noor University [01/09/2013 – 29/06/2018]

City: Mashhad | Country: Iran

Teaching various computer courses such as:

- Software Engineering, Principles of Software Designing, Databases Management, Algorithms and Data Structures, Advance programming C, C++, etc., Computer Software Utilization in other Sciences, and supervise more than 20 undergraduate students' final projects of Computer Engineering

Lecturer of Advanced Computer Courses (Part-Time)

Technical and Vocational Training Organization [24/09/2010 – 01/09/2017]

City: Mashhad

Delivered advanced vocational courses in computer science, including:

- Microsoft SQL Server Management, Python, Java, Ajax Programming,, Network Technician and units Troubleshooting, MS Project, SPSS, etc.
- Mentored participants in national skill competitions

EDUCATION AND TRAINING

PhD of Medical Informatics

Mashhad University of Medical Sciences

City: Mashhad | Country: Iran | Website: www.mums.ac.ir | Field(s) of study: AI-Based IT Models and CDSS | Final grade: Completed with excellent grade, formal issuance of degree contingent on national services | Level in EQF: EQF level 8 | Thesis: Design, development and evaluation of a Medication Decision Support System for increasing the safety of hospitalized patients

Achievements: product-oriented thesis with below publications

- Selected as a product-oriented thesis, equivalent to an ISI-indexed publication with an impact factor greater than 1.5
- Assessment of the Logical Prescription of Albumin Drug According to Guideline and Patient Safety for Inpatients in Intensive Care Units of Iranian Hospital: A Cross-sectional Study, Archives of Anesthesiology and Critical Care, Sep 2024 (In Press)
- The Impact of Medication Decision Support Systems on Drug Utilization Evaluation, Guideline Adherence, and Patient Safety for Albumin Therapy in Intensive Care Units, International Journal of Exploratory Research in Clinical and Social Pharmacy, August 2024, (Under Second Revision)
- The Effect of Medication Related Decision Support Systems on Safety Improvement of Hospitalized Patients: Systematic Review, Journal of patient Safety and Risk Management, May 2024 (Under Revision)
- Liver Lesions Detection and Classification in Ultrasound Images Using Gabor Characterization, Edge Detection and Artificial Neural Networks", International Medical Technologies Journal, Vol. 01, Issue 04, October-December 2017.

Master of science of Software Engineering

Payam-e Noor University

City: Tehran | Country: Iran | Website: www.PNU.ac.ir | Field(s) of study: Workflow Optimization in Cloud Computing | Level in EQF: EQF level 7 | Thesis: A heuristic approach based on PSO for effective scheduling of independent tasks in cloud computing environments

Achievements: published advanced research in cloud computing.

- A Symmetric Tasks Scheduling Algorithm Based on PSO in Cloud Computing, International Journal of Computer and Information Technology (IJCIT), Vol. 04, Issue 04, November 2016
- A Heuristic Approach Based on PSO with Effective Parameters for Independent Tasks Scheduling in Cloud Computing, Journal of Computing, Vol. 04, Issue 05, May 2012

LANGUAGE SKILLS

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

German

LISTENING A2 READING A2 WRITING A2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Programming Skills

Python / SQL / R / Java / Bash / PowerShell

Data Science

data collection / data preparation / data analysis / data visualization / SPSS / power BI

Version Control and Automation

Git / CI/CD / Docker

Health Care IT Skills

Clinical Decision Support Systems / EHR Integration / Workflow Optimization and Digitalization / HL7/FHIR, DICOM / G
DPR/HIPAA

AI Technology

Predictive Modeling / Scipy, Numpy, Scikit-learn, Tensorflow, Pytorch, Pandas, Keras / NLP application

Project Management

agile project management (Scrum) / MS project / Jira / Workflow Mapping / UML

Database Management

Ms Sql / MY Sql

Soft Skills

Team Work / Time Management / Effective Communication / Public Relation

PROJECTS

[10/2023 – Current]

Scalable Healthcare Platform for Preventive Pet Care (ICPet)

Designed an AI-driven platform for real-time health monitoring and preventive care for pets.

- **AI Integration:** Implemented disease detection and personalized care recommendations using NLP.
- **Outcome:** Improved health outcomes through predictive analytics, securing acceptance for the Netherlands Startup Visa.

[03/2022 – 02/2024]

Medication Decision Support System (MDSS)

Developed a Medication Decision Support System (MDSS) to enhance patient safety and reduce medication errors through AI-driven solutions.

- **Requirement Gathering:** Collaborated with clinicians to identify challenges in prescribing processes.
- **AI Integration:** Designed an inference engine powered by machine learning for real-time medication recommendations.
- **Outcome:** Reduced medication errors by 20% within six months; findings published in peer-reviewed journals.

[11/2023 – Current]

AI for Mental Health Diagnostics (MindsEcliptic)

Developed an AI-based speech recognition model to detect early signs of mental disorders.

- **Algorithm Design:** Integrated NLP and machine learning for linguistic and emotional analysis.
- **Outcome:** Enhanced workplace mental health management, reducing absenteeism and improving productivity.

[05/2024 – 07/2024]

AI-Driven Heart Disease Prediction Models

Built predictive models to improve heart disease diagnosis.

- **Model Development:** Designed and optimized machine learning models, including Random Forest and Neural Networks.
- **Outcome:** Deployed a user-friendly tool for clinicians, enhancing diagnostic speed and accuracy

[03/2024 – 10/2024]

Automated Hospital Data Reporting

Automated manual workflows for patient data reporting in hospitals.

- **ETL Implementation:** Designed pipelines to integrate patient data from multiple systems into unified formats.
- **Dashboard Development:** Created real-time interactive dashboards using Power BI.
- **Outcome:** Reduced reporting time by 70% and minimized errors.

[01/2018 – 12/2023]

Healthcare Policy Analysis and Administrative Systems

Designed data-driven systems to enhance healthcare policy analysis and administrative workflows in Khorasan province.

- **Data Pipelines and Dashboards:** Created robust pipelines to aggregate healthcare data, providing actionable insights.
- **Workflow Optimization:** Automated periodic reporting, reducing manual effort and improving efficiency.
- **Outcome:** Improved policy analysis and operational efficiency, supporting data-driven decision-making

[09/2016 – 01/2017]

AI for Liver Lesion Detection in Ultrasound Imaging

Implemented advanced image processing techniques and AI models for liver lesion detection in ultrasound images.

- **Image Processing:** Applied Gabor filters and edge detection algorithms for precise lesion segmentation.

- Model Development: Trained an Artificial Neural Network (ANN) for accurate lesion classification.
- Outcome: Enhanced non-invasive diagnostic methods; awarded Best Poster at international congresses

[06/2016 – 02/2017]

Brain Tumor Detection Using Image Segmentation

Advanced brain tumor detection in MRIs using cutting-edge image segmentation techniques.

- Clustering Algorithm: Applied K-means++ clustering and Sobel filters for tumor boundary identification.
- Outcome: Increased accuracy of tumor detection, findings presented at national and international congresses

CONFERENCES AND SEMINARS

[09/05/2024 – 09/05/2024] Isfahan University of Medical Sciences, Isfahan, Iran

The 2nd National Congress on Rational Use of Medicines

Presented article titled:

- N. Dashti, H. Vakili Arki, "**Evaluation of the rational prescription of albumin according to guidelines and patient safety for hospitalized patients in intensive care units: a cross-sectional study**"

[28/02/2017 – 02/2017] Mashhad University of Medical Sciences, Mashhad, Iran

International Congress of Diseases and Health Outcomes Registry and First National Congress of Medical Informatics

Awarded best poster at international congresses for below research titled:

- N. Dashti, E. Aameli, "**Lesions Detection of Liver Tissue in Ultrasound Images Using Gabor Feature Extraction, Edge Detection and Artificial Neural Networks**"

Presented article titled:

- N. Dashti, E. Aameli, "**Images Segmentation for Brain Tumor Detection through K-means++ Clustering Algorithm and Sobel Filter**"

[22/02/2017 – 23/02/2017] Shiraz University of Medical Sciences, Shiraz, Iran

Shiraz Second International Congress on m-Health

Presented the below articles:

- N. Dashti, A. Bordbar, "**Effects of Internet-Based Cognitive-Behavioral Therapy Methods via Mobile Phone on Patients with Insomnia Disorder**".
- N. Dashti, A. Bordbar, "**The Effect of Mobile Phone Use at Bedtime on Sleep Disorders and Its Complications**".

CERTIFICATES

Recent Certificates

- Python for Data Science and Machine Learning - 2024
- IT Projects Management, 2022
- Python Programming, 2023
- AI-based Recommendation Systems

REFERENCES

Available upon request